## SUBJECT NO-EC21006, SUBJECT NAME- ELECTROMAGNETIC ENGINEERING

LTP- 3-1-0,CRD- 4

## SYLLABUS :-

Maxwell s equations: displacement current, equation of continuity, boundary conditions; propagation of uniform plane waves in unbounded medium: reflection, refraction, phase and group velocities; transmission lines and waveguides: modes, design, travelling waves, standing waves, pulse propagation, characteristic impedance, cut-off frequency, attenuation, dispersion, power-handling capability; Smith chart and impedance matching techniques; radiation concept: elementary dipole, half-wave dipole, radiation patterns, gain, pattern multiplication, other basic antennas.